

## Solving Linear Systems by Substitution

Date: \_\_\_\_\_

Method of Substitution involves isolating one variable in one of the equations, then “substituting” this expression into the other equation to create a third equation that contains only one variable.

EX: Solve by the substitution method and check.

$$\begin{aligned}y &= 5x - 2 \\ 6x + 3y &= 36\end{aligned}$$

$$\begin{aligned}\text{EX: } 2x - y + 1 &= 0 \\ 4x + y - 5 &= 0\end{aligned}$$

- Steps for Substitution:**
- A. Label equation 1 and 2.**
  - B. Isolate one variable in either 1 or 2.**
  - C. Substitute the expression from step B into the other equation and solve for the remaining variable.**
  - D. Substitute the solution from step C back into equation 1 or 2 to find the other variable.**
  - E. Write the solution as an ordered pair.**